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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,044	04/23/2004	Yasuhiro Ogata	Q80791	8714
23373	7590	06/07/2007	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			SHEWAREGED, BETELHEM	
			ART UNIT	PAPER NUMBER
			1774	
			MAIL DATE	DELIVERY MODE
			06/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/830,044	Applicant(s) OGATA ET AL.	
	Examiner Betelhem Shewareged	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6 and 8-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 8-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response filed on 03/15/2007 has been fully considered. The 35 USC 102 rejection has been withdrawn in view of Applicant's amendment and comments.
2. Claims 1 and 5 are amended, claims 4 and 7 are canceled, claims 23-27 are added, and claims 1-3, 5, 6 and 8-27 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5, 6 and 8-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majumdar et al. (US 6,475,696 B2) in further view of Ohbayashi et al. (US 6,492,005 B1) and Serizawa et al. (US 2002/0058589 A1).
5. Majumdar discloses an imaging member comprising an image layer and a support (abstract). The support comprises a paper sheet and a layer (also referred as "nanocomposite material"), wherein the layer comprises an inorganic particle such as mica having the claimed aspect ratio, and a resin such as polyvinyl alcohol. The layer further comprises optional components such as titanium oxide, zinc oxide, talc, calcium carbonate, zinc stearate and fatty amides. The layer may be applied on both sides of the support. (See col. 3, line 65 thru col. 4, line 52; col. 7, line 19 thru col. 8, line 26; col. 11, lines 1-11 and 64; and claims 1, 12 and 19).

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6. Majumdar does not disclose image layer as claimed.

7. Ohbayashi teaches a recording sheet comprising a support and an ink absorptive layer (abstract). The ink absorptive layer comprises a resin such as polyvinyl alcohol, gelatin and cellulose and a hardener such as boron compound (col. 13, line 61 and col. 15, line 52).

8. Majumdar and Ohbayashi are analogous art because they are from the same field of endeavor that is the recording sheet art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the ink absorptive layer of Ohbayashi with the invention of Majumdar so as to provide a recording sheet having enhanced image quality, drying property and water resistance property.

9. In Majumdar, the layer between the support and the image layer does not comprise water swellable synthetic mica as claimed.

10. Serizawa teaches a recording material comprising a support, a resin layer on the support and a recording layer on the resin layer (abstract). The resin layer comprises a binder such as gelatin and polyvinyl alcohol, and water swellable synthetic mica having an aspect ratio of 100 or more ([0022], [0043] and [0061]-[0065]).

11. Majumdar and Serizawa are analogous art because they are from the same field of endeavor that is the recording medium art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the resin layer of Serizawa with the invention of Majumdar in order to prevent printed image defects (see [0024] of Serizawa).

Response to Arguments

12. Applicant's arguments are based on that Serizawa fails to teach that the resin layer (undercoat layer) containing mica is provided between the support and the recording layer, and none of Majumdar, Ohbayashi or Serizawa teach or suggest a back-coat layer containing a water-swellable synthetic mica, as recited in the claims of the present application. These arguments are not persuasive for the following reasons. The resin layer of Serizawa is provided between the support and the recording layer (abstract and [0023]), wherein the resin layer comprises water swellable synthetic mica having an aspect ratio of 100 or more ([0061]-[0065]). The resin layer of Serizawa is combined with the invention of Majumdar, and the nanocomposite material layer of Majumdar is provided both on the topside and the bottom side of the support. Thus the combination of Serizawa and Majumdar teach the claimed backcoat layer and the claimed undercoat layer. Therefore, claims 1-3, 5, 6 and 8-22 stand rejected and claims 23-27 are included in the rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

14. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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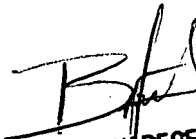
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-272-1529. The examiner can normally be reached on Mon.-Fri. 8:00AM-4:30PM.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BS
June 1, 2007.


BETELHEM SHEWAREGED
PRIMARY EXAMINER